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Yoshiya Fujishiro

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EXAMINER

SAINT CYR, JEAN D

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/582,164	<b>Applicant(s)</b> FUJISHIRO, YOSHIYA	
	<b>Examiner</b> JEAN D. SAINT CYR	<b>Art Unit</b> 2425	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### **Response to Amendment**

This action is in response to applicant's amendment filed on 10/24/2008. Claims 1-10 are still pending in the current application. This action is made NON-FINAL.

### **Response to Arguments**

Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection. Applicant argues that the cited references did not disclose a Gop consisting of one I-frame and an MPEG data containing smaller number of picture than that of before receiving an instruction to switch to a channel.

However, Kato et al disclose a certain period of time is required for gaining normal video signals after a user switches to another TV channel. That means after a user sends a request to switch to another channel, the number of pictures of the MPEG data reduces for a while before gaining normal video signals.

Wilkinson et al disclose encoded signal has a GOP of 1 frame:-I, paragraph 80; an MPEG-2 Intra-frame encoded signal having a GOP length of 1, consisting of I-frames, paragraph 31, that means a GOP length of 1 has only one frame representing the I-frame. As a result, this action is made NON-FINAL.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 8, 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Kato et al, US Patent No. 20030016944.

Re claim 8, Kato et al disclose a receive section (see fig.1, element 70, reproduction unit) for receiving an analog broadcast signal (with a simultaneous recording/reproducing function for analog terrestrial-broadcast TV signals, 0038);

a user interface section for receiving an instruction to switch a channel of a broadcast signal received by the receive section from a user (see fig.1, element 79, remote controller I/F);

an encoder for encoding a switched channel analog broadcast signal received by the receive section in MPEG form, when the user interface section receives a channel switching instruction from the user(see fig.1, element 53, MPEG-2 encoder), to initially create MPEG data made up of one GOP comprising of smaller numbers of pictures than that before receiving said switching instruction(a certain period of time is required for gaining normal video signals after a user switches to another TV channel, 0074; that means less number of picture).

Re claim 10, Kato et al disclose receiving(see fig.1, element 70, reproduction unit) an analog broadcast signal(with a simultaneous recording/reproducing function for analog terrestrial-broadcast TV signals, 0038);

receiving an instruction to switch a channel of a broadcast signal to be received (see fig.1, element 79, remote controller I/F);

encoding a received switched channel analog broadcast signal, when a channel switching instruction is received from the user (see fig.1, element 53, MPEG-2 encoder), to initially create MPEG data made up of one GOP comprising of smaller numbers of pictures than that of before receiving said switching instruction (a certain period of time

is required for gaining normal video signals after a user switches to another TV channel, 0074; that means less number of picture);

decoding the encoded data (see fig.1, element 72); and

outputting a decoded image signal for a still picture (The decoded digital video signal and the CH-displaying signal are multiplexed into a composite signal which is then sent to the monitor TV 90 via the D/A converter 74, 0050).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al in view of Wilkinson et al, US No. 6160844.

Re claim 1, Kato et al disclose an AV server provided with a receive section(see fig.1; the home server and each set-top box are used as a bitstream transmitter and a bitstream receiver, 0165) for receiving an analog broadcast signal(with a simultaneous recording/reproducing function for analog terrestrial-broadcast TV signals, 0038), an encoder for encoding the analog broadcast signal received by the receive section in MPEG form(see fig.1, element 53, MPEG-2 encoder), and a network interface section for transmitting data encoded by the encoder via a network(see fig.1, connection between element 61 and 71; , and

an AV client unit provided with a network interface section for receiving data transmitted via the network(see fig.1, element 70, reproduction section; receivers can be connected to one another via a network to structure a network video system, 0166) , a decoder for decoding MPEG data received by the network interface section(see fig.1, element 72, MPEG-2 decoder; reproduced video signals are decompressed on time base by the buffer memory 71 and decoded by the MPEG-2 decoder 72, 0148) , an output section for outputting an image signal decoded by the decoder(The decoded digital video signal and the CH-displaying signal are multiplexed into a composite signal which is then sent to the monitor TV 90 via the D/A converter 74,0050) , and a user interface section for receiving an instruction to switch a channel of a broadcast signal received by the receive section of the AV server from a user(see fig.1, element 79, remote controller I/F; a user operates the remote controller 95 to emit an infrared signal for a TV channel of interest. The infrared signal is received by the remote-controller I/F 79. TV-channel information carried by the infrared signal is sent to the TV tuner 51), wherein

when the user interface section receives an instruction to switch the broadcast signal channel from the user (a user operates the remote controller 95 to emit an infrared signal for a TV channel of interest. The infrared signal is received by the remote-controller I/F 79. TV-channel information carried by the infrared signal is sent to the TV tuner 51), the encoder encodes a switched channel analog broadcast signal received by the receive section(The switch SW is controlled by the microcomputer 76 to select either video signals from the A/D converter 52 or mute signals from the mute-signal generator 56 and supplies the selected signals to the MPEG-2 encoder 53,0090) , to initially create MPEG data made up of one GOP consisting of one I picture, the decoder decodes data made up of the one GOP consisting of one I picture received via the network and encoded by the encoder(The disk-management information includes addresses to be recorded on the hard disk 63 and locations ,on the hard disk, of I frames or pictures of each GOP in an MPEG-2-encoded pictures, 0097), and the output

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section outputs an image signal for still picture decoded by the decoder(The decoded digital video signal and the CH-displaying signal are multiplexed into a composite signal which is then sent to the monitor TV 90 via the D/A converter 74,0050).

But Kato et al did not explicitly disclose create MPEG data made up of one GOP consisting of one I picture.

However, Wilkinson et al disclose encoded signal has a GOP of 1 frame:-I, paragraph 80; an MPEG-2 Intra-frame encoded signal having a GOP length of 1, consisting of I-frames, paragraph 31, that means a GOP length of 1 has only one frame representing the I-frame.

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to combine Kato's invention with Wilkinson invention for the purpose of making the system more compatible in encoding signal.

Re claim 2, Kato et al disclose a receive section (see fig.1, element 70, reproduction unit) for receiving an analog broadcast signal (with a simultaneous recording/reproducing function for analog terrestrial-broadcast TV signals, 0038);

a user interface section for receiving an instruction to switch a channel of a broadcast signal received by the receive section from a user (see fig.1, element 79, remote controller I/F);

an encoder for encoding a switched channel analog broadcast signal received by the receive section in MPEG form, when the user interface section receives a channel switching instruction from the user(see fig.1, element 53, MPEG-2 encoder), to initially create MPEG data made up of one GOP consisting of one I picture;

a decoder for decoding the data encoded by the encoder (see fig.1, element 72);  
and

an output section for outputting an image signal for a still picture decoded by the decoder (The decoded digital video signal and the CH-displaying signal are multiplexed into a composite signal which is then sent to the monitor TV 90 via the D/A converter 74, 0050).

But Kato et al did not explicitly disclose create MPEG data made up of one GOP consisting of one I picture.

However, However, Wilkinson et al disclose encoded signal has a GOP of 1 frame:- I, paragraph 80; an MPEG-2 Intra-frame encoded signal having a GOP length of 1, consisting of I-frames, paragraph 31, that means a GOP length of 1 has only one frame representing the I-frame.

It would have been obvious for any person for any person of ordinary skill in the art at that time the invention was made to combine Kato's invention with Wilkinson invention for the purpose of making the system more compatible in encoding signal.

Re claim 9, see rejection on claim 2.

Claims 3-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al in view of Wilkinson further in view of Hodge et al, US No. 5594491.

Re claim 3, Kato et al disclose the decoder decodes MPEG data made up of one GOP consisting of one I picture stored in the buffer memory, and sends the decoded image signal for a still picture repeatedly to the output section (The signal is decompressed and decoded into a digital video signal by the MPEG-2 decoder 72



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under the MPEG-2 standards. The digital video signal is supplied to the OSD 73. The OSD 73 generates a CH, channel,-displaying signal. The decoded digital video signal and the CH-displaying signal are multiplexed into a composite signal which is then sent to the monitor TV 90 via the D/A converter 74, 0050).

But did not explicitly disclose wherein: the decoder is provided with a buffer memory for storing MPEG data sent from the decoder.

However, Hodge et al disclose the MPEG decoder has an associated small buffer unit that can store at least one entire segment for painting the screen of the associated television receiver until the next segment arrives in col.4, lines 42-45.

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to associate a buffer with the MPEG decoder into the system of Kato in view of Wilkinson for the benefit of making the system more efficient in decoding data.

Re claim 4, Kato et al disclose the decoder discards data stored in the buffer memory when the user interface section receives a channel switching instruction (Any encoded signals received on CH A and already stored in the buffer memory 55 can be recorded on the hard disk 63 even after that the MPEG-2 encoder 53 has been brought in a halt from encoding operation. Recording halts at a point P8 just before the end of the video area 11 received on CH A, so that no signals will be recorded in the video area 12, thus signals distorted due to TV-channel switching being not reproduced, 0081).

But did not explicitly disclose wherein: the decoder is provided with a buffer memory for storing MPEG data sent from the decoder.

However, Hodge et al disclose the MPEG decoder has an associated small buffer unit that can store at least one entire segment for painting the screen of the associated television receiver until the next segment arrives in col.4, lines 42-45.

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to associate a buffer with the MPEG decoder into the system of Kato in view of Wilkinson for the benefit of making the system more efficient

Re claim 5, Kato et al disclose wherein: the decoder discards data stored in the buffer memory(Any encoded signals received on CH A and already stored in the buffer memory 55 can be recorded on the hard disk 63 even after that the MPEG-2 encoder 53 has been brought in a halt from encoding operation. Recording halts at a point P8 just before the end of the video area 11received on CH A, so that no signals will be recorded in the video area 12, thus signals distorted due to TV-channel switching being not reproduced, 0081), and discards data received before receipt of data made up of one GOP consisting of one I picture from the encoder(it will stop the supply of signals to the stream analyzer 54 for a period of time in which no normal MPEG-2-encoded digital video signals are expected to be supplied from the BS tuner 51a due to channel switching,0056).

Re claim 6, Kato et al disclose the decoder stores data received consecutively with the data made up of one GOP consisting of one I picture in the buffer memory , and decodes the data to output the MPEG data made up of one GOP consisting of one I picture stored in the buffer memory until a given amount of data has been accumulated in the buffer memory(the bitstream segment is stored in the buffer memory 71 for a period Pa until an enough amount of bitstream is stored , 0069; that means the decoding will start after a given amount of data is stored in the buffer).

But did not explicitly disclose wherein: the decoder is provided with a buffer memory for storing MPEG data sent from the decoder.

However, Hodge et al disclose the MPEG decoder has an associated small buffer unit that can store at least one entire segment for painting the screen of the associated television receiver until the next segment arrives in col.4, lines 42-45.

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to associate a buffer with the MPEG decoder into the system of Kato in view of Wilkinson for the benefit of making the system more efficient.

Re claim 7, Kato et al disclose the decoder , after decoding data made up of one GOP consisting of one I picture, stores data received consecutively with the data in the buffer memory , and sequentially decodes the data to output the image signal so that a frame of the decoded image signal is interpolated(The adjusted signal is once stored in the buffer memory 71 for decompression on time base and supplied to the MPEG-2 decoder 72 on request, 0049 ; that means the decoder outputs by sequences).

But did not explicitly disclose wherein: the decoder is provided with a buffer memory for storing MPEG data sent from the decoder.

However, Hodge et al disclose the MPEG decoder has an associated small buffer unit that can store at least one entire segment for painting the screen of the associated television receiver until the next segment arrives in col.4, lines 42-45.

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to associate a buffer with the MPEG decoder into the system of Kato in view of Wilkinson for the benefit of making the system more efficient.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Duclos Saintcy whose phone number is 571-270-

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3224. The examiner can normally reach on M-F 7:30-5:00 PM EST. If attempts to reach the examiner by telephone are not successful, his supervisor, Brian Pendleton, can be reached on 571-272-7527. The fax number for the organization where the application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, dial 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jean Duclos Saintcyr

/Brian T. Pendleton/

Supervisory Patent Examiner, Art Unit 2425